



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,084	04/02/2004	Andreas Hauger	HN 1010 PUS	2140
7590	05/03/2006		EXAMINER	
Robert P. Renke Suite 250 28333 Telegraph Road Southfield, MI 48034			WOLFE, DEBRA M	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,084	HAUGER, ANDREAS	
	Examiner	Art Unit	
	Debra Wolfe	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 and 24-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-12 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 13-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group 1 pertaining to claims 1-5 and 10-23 in the reply filed on April 13, 2006 is acknowledged.

Information Disclosure Statement

The information disclosure statement filed April 2, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Copies of Patent DE 3024682 A1 and WO 03/008122A1 have not been received.

Drawings

The drawings are objected to because numeral 24 is missing a reference line. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be



labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 1, 10, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Brockes et al (US PUB # 2004/0177666). Brockes discloses a cold rolling mill for rolling a metal strip (8) having a first reeling device (9), a rolling stand (1) comprising of two working rolls (13,14) with an adjustable roll gap, a second reeling device (10), a first (6,17) and second (7,17) strip storage assembly comprising a plurality of rolls wherein the first strip storage assembly (6,17) is located between the first reeling device (9) and the rolling stand (1) and the second strip storage assembly (7,17) is located between the rolling stand (1) and the second reeling device (10). Brockes et al further discloses each strip storage assembly (6,17 and 7,17) being a double-roll assembly wherein the strip is wrapped in an S-like way around two rolls (6,17; 7,17) whose axes are arranged at different levels and wherein the first roll (6,7) tensions the strip (8) between the double roll assembly and the rolling stand (1) and the second roll (17) tensions the strip (8)



between the double roll assembly and the respective reeling device (9,10). Through the movement of movable rolls (6,7) the length of the piece of strip between the second roll (17) and the first roll (6,7) can be varied during the rolling process. Brockes et al also discloses the use of a lower roll (6,7) being pivotable from an operation position to an introduction position with the strip running off from the underside of the first reeling device (9) and running in on the underside of the second reeling device (10). With regards to claim 1 Brockes et al discloses the process of guiding the metal strip (8) over the strip storage assemblies (6,17; 7,17) in the form of an "S" and controlling the movement of rolls (6,7) to distort the "S".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 10-12 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vydrin et al (U.S. Patent # 3,823,593) in view of Cook (U.S. Patent # 2,647,743). Vydrin et al discloses a method of rolling metal sheet between driven rolls of a rolling mill wherein the rolling mill has a first reeling device (15), a rolling stand (8) housing two work rolls (9,10) whose roll gap width is controllable through a presser means [See col. 5 lines 56-60], a second reeling device (14), a first (16) and second (17) strip storage assembly comprising of a double-roll assembly wherein the first strip storage assembly (16) is located between the first reeling device (15) and the rolling stand (8) and the second strip storage assembly (17) is located



between the rolling stand (8) and the second reeling device (14). The strip is wrapped in an S-like way around the two rolls whose axes are arranged at different levels wherein the first roll tensions the strip between the double roll assembly and the rolling stand (8) and the second roll tensions the strip between the double roll assembly and the respective reeling device. It is noted that figure 6 of Vydrin et al shows the strip running off from the underside of the first reeling device (15). Vydrin et al discloses the invention substantially as claimed except for wherein the at least one movable roll varies the length of the strip between the reeling device and the second roll or varies the length of the strip between the second roll and the first roll during the rolling process. However, Cook teaches the use of a double roll assembly having two rolls (12,10) attached by means of a bracket (14) to the shafts (16,18) of the rolls (12,10) such that the lower roller (10) can move in relation to the other roller (12) [See col. 4, lines 16-20]. Through the movement of the lower roller (10) the rolls are capable of at least partially overlapping in a vertical projection and the axes of the rolls are at least temporarily positioned one above the other when moving. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the lower tension rolls (16,17) of Vydrin et al to be movable in relation to the other roll as taught by Cook in order to vary the tension force placed on the strip. With regards to claims 1-5, Vydrin et al in view of Cook is capable of performing the process claimed wherein the arches of the "S" at least partially overlap and the centers of the overlapping arches of the "S" overlap one another at least temporarily in the vertical direction during a controlled movement. In addition the movement of at least one of the rolls allows the position of the lower arch of the "S" and the upper arch of the "S" to be changed.



2. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vydrin et al and Cook in view of Brockes et al (US PUB# 2004/0177666). Vydrin et al in view of Cook discloses the invention substantially as claimed except for wherein the strip runs in on an underside of the first reeling device. However, Brockes et al discloses in figure 1 the strip (8) runs in on the underside of the second reeling device (10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the direction the strip runs into the second reeling device of Vydrin et al with the direction the strip runs into the second reeling device of Brockes et al in order to better tension the strip prior to being coiled.

Allowable Subject Matter

Claims 13-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Wolfe whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 6am - 3:30pm with alternating Friday 6am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Application/Control Number: 10/817,084
Art Unit: 3725

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Debra Wolfe
Examiner
Art Unit 3725

A handwritten signature in black ink, appearing to read "D. Banks", is written over a horizontal line.

DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700